

**ABSTRACT****EFFICIENT FLAT LIGHT SOURCE**

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Disclosed here is an efficient flat light source based on UV light excited photoluminescence of phosphors. An electrical discharge is confined to be substantially planar by a glass enclosure. This electrical discharge produces ultraviolet photons. These UV photons in turn excite phosphors to produce visible light with great efficiency and high intensity. In this invention, light is taken out of the light source from one side only. A UV light recycling means is also provided. Means for collimation of this light source is disclosed for projection display applications. Polarization conversion means is also described for such flat light sources, so that the light output is almost totally linearly polarized.

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